

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Ball Metal Beverage Container Corp.
750 Old Abingdon Highway - Bristol, Virginia
Permit No. SWRO10060

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal air pollution operating permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Ball Metal Beverage Container Corp. has applied for a Title V Operating Permit for its Bristol, Virginia facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Deputy Regional Director: _____ Date: _____

FACILITY INFORMATION

Permittee

Ball Metal Beverage Container Corp.
9300 West 108th Circle
Broomfield, Colorado 80021-3682

Facility

Ball Metal Beverage Container Corp.
750 Old Abingdon Highway
Bristol, Virginia 24201-1899

County-Plant Identification Number: 51-520-00060

SOURCE DESCRIPTION

NAICS Code: 332431 – Manufacturing Aluminum Can Ends

The plant produces beverage can ends processed from aluminum sheets. Several high-speed machines press the aluminum into lids of various sizes, the rims of the ends are coated with compound liner for sealing, and a tab is formed and attached to the ends. Volatile organic compound (VOC) emissions result from evaporation of solvent in the end seal compound, tab lubricant, and cleaning solvents. The Crown compound liner machines have potential to emit VOC. The Preferred compound liner machines apply a waterbase material, and do not emit VOC.

The facility is a Title V major source of VOC emissions. This source is located in an attainment area for all pollutants, and is considered a synthetic minor source with respect to PSD regulations since VOC emissions are enforceably limited below 250 tons per year. The facility was previously permitted under a minor NSR Permit issued on November 14, 2000 as amended May 2, 2001, November 22, 2002, and December 16, 2004 and also a state operating permit issued on December 16, 2004.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was completed on August 29, 2006. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Lines 1, 2, 3, 4, 5, 6, SEMS	----	27 Crown Compound Liners; 9 Stolle presses; 2 Tab presses; installed 1971 - 1997 4 Stolle presses; installed 1999	1100 ends/min each 1875 ends/min each	-----	----	----	minor NSR - 11/14/00 (as amended 05/02/01, 11/22/02, & 12/16/04) & State Operating Permit – 12/16/04
Unit Ref. 04	AS-1A, AS-1B, AS-2A, AS-2B, Cyclone-1	Aluminum Scrap Collection from shell and tab formation processes. Pneumatic transfer, chopping, briquetting.	12,000 lb/hr maximum aluminum processing rate	4 Aluminum Scrap Air Screens 1 Aluminum Tab Scrap Cyclone	AS-1A, AS-1B, AS-2A, AS-2B, Cyclone-1	PM	----
R&D Line		1 Stolle Press	1875 ends/min	-----	----	----	----

✓ **Note:** The company plans to install 5 Preferred compound liner machines to replace 5 Crown compound liner machines, bringing the total Crown liners to 22 units.

EMISSIONS INVENTORY

The 2005 annual emission inventory report shows the following:

2005 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO ₂	PM ₁₀	NO _x
Total	104.9	0.46	----	0.04	0.45

No hazardous air pollutants were emitted from the facility in 2005.

FACILITY-WIDE APPLICABLE REQUIREMENTS

Limitations

The following limitations are state BACT requirements from Conditions 3, 4, and 5 of the minor NSR permit issued on November 14, 2000 (as amended May 2, 2001, November 22, 2002, and December 16, 2004):

Condition 3 limits the VOC throughput and emissions from the facility to 200 T/yr.

Condition 4 requires that the facility be constructed so as to allow for emissions testing.

Condition 5 requires the company to maintain records including MSDS for each material, material usage, and annual VOC throughput and emissions estimates, as the sum of each consecutive 12 month period.

The following limitations are requirements from Conditions 3, 4, and 5 of the state operating permit dated December 16, 2004:

Condition 3 limits hazardous air pollutant (HAP) throughput and emissions to 9.5 T/yr of any individual HAP and 24.5 T/yr of total HAPs, as the sum of each consecutive 12 month period.

Condition 4 requires that the company maintain records demonstrating compliance with these limitations, including MSDS for all materials indicating HAP content, and monthly and annual HAP throughput and emissions from the operations.

Condition 5 requires that the facility be constructed so as to allow for emissions testing.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-40-260 and 9 VAC 5-40-22 contain requirements for General Process Operations, including standards for particulate matter emissions. These standards apply to processes that generate particulate matter emissions. Since the aluminum scrap chopping and screening operation has potential to produce particulate matter emissions, it is subject to these standards.

9 VAC 5-50-80 contains general opacity requirements for sources of visible emissions. A 20% opacity requirement applies, not to exceed 30% opacity for any six-minute period in an hour. This requirement applies to potential particulate matter emissions from the aluminum scrap chopping and screening operation.

Monitoring and Recordkeeping

The monitoring and recordkeeping requirements in Condition 5 of the NSR permit have been modified to meet Part 70 requirements.

The Title V permit includes a requirement to monitor and record the monthly and annual throughput of compound, tab lube, and solvent materials by the facility. Also, monthly and annual throughput and emissions of HAPs and VOC based on material balance will be calculated for the facility. The company is required to maintain a Material Safety Data Sheet (MSDS) for each material used at the facility, showing the HAP and VOC content. VOC content will be determined by 40 CFR 60, Appendix A, Method 24 or other EPA approved method. HAP content will be determined by 40 CFR 63, Appendix A, Method 311 or other EPA approved method. A certified product data sheet may be used as long as VOC and HAP contents are determined by an EPA test method.

Visible emissions from the facility are not expected from the volatilization of compound, tab lube, or solvent materials. The volatile compound emissions originating from the compound liner machines and tab presses pass through a hood and are vented through common stacks, but also may result from subsequent processing and handling. For this reason, the company considers such an emission source as fugitive in nature, although the volatile compound emissions are eventually routed through general ventilation.

The aluminum scrap chopping and screening operation involves handling, processing, and collecting aluminum scrap for recycle. The scrap is transferred by a pneumatic system. A cyclone is employed to collect the scrap from the tab-forming operations. Screens are used to collect aluminum scrap from other processes for briquetting. The scrap is approximately 1/8" in diameter, and negligible particulate matter emissions are anticipated. The company will be required to inspect the cyclone and screens once annually to verify structural integrity. The permit contains a requirement to perform weekly visible emission observations on the cyclone and air screen exhausts. The observations may be conducted on a quarterly basis upon demonstrating that no visible emissions result over a period of time. If visible emissions are present, a six-minute visible emission evaluation (VEE) must be performed according to 40 CFR 60, Appendix A, Method 9. If during the six minutes, the average opacity exceeds 20%, the company must then take corrective action. If corrective action fails to produce opacity less than 20%, an 18-minute VEE using 40 CFR 60, Method 9 is required to determine compliance. Instances of excess emissions will be recorded and reported. The observer must be certified to

perform Method 9 evaluations. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

9 VAC 5-40-260 contains particulate matter standards that apply in the absence of more stringent standards. Although no particulate matter emissions are anticipated, the requirements pertaining to General Process Operations would technically apply. The company indicates that their facility-wide maximum processing capacity is approximately 12,000 pounds of aluminum sheet per hour. This corresponds to an allowable particulate matter emission rate of 13.6 pounds per hour. This rate is viewed as unachievable for this process, but in the absence of better data, it will be accepted as a maximum emission rate. Compliance will be verified by annual inspection of the cyclone and air screens, and by visible emission observations.

Testing

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting requirements for this operation have been included in the permit.

Streamlined Requirements

There are no streamlining proposals for this operation.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

The general requirements that apply to the facility include the administrative requirements of 9 VAC 5 Chapters 20 and 50 of state regulations that describe the authority of the DEQ and the responsibility of the company to supply accurate information and provide adequate response to inquiries pertaining to air emissions. These chapters also outline the responsibility of the company to maintain the facility in proper operation.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State

Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

This general condition cites the sections that follow:

- 9 VAC 5-80-80. Application
- 9 VAC 5-80-140. Permit Shield
- 9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

- 9 VAC 5-50-50. Notification, Records and Reporting

J. Permit Modification

This general condition cites the sections that follow:

- 9 VAC 5-80-50. Applicability, Federal Operating Permits For Stationary Sources
- 9 VAC 5-80-190. Changes to Permits.
- 9 VAC 5-80-260. Enforcement.
- 9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
- 9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
- 9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

9 VAC 5-80-1100 – 1320 requires that state-only enforceable permit requirements be placed in a designated section of the permit (9 VAC 5-80-1120 F). Such designated requirements are not considered federal applicable requirements.

Conditions 6, 7, and 8 of the minor NSR Permit issued on November 14, 2000 (as amended May 2, 2001, November 22, 2002, and December 16, 2004) limit throughput and emissions, and require recordkeeping for n-hexane, a toxic air pollutant to which state regulations apply. The conditions also require notification and recordkeeping should other toxic air pollutants be emitted.

These conditions are contained within a state-only enforceable section of the minor NSR permit, and are not included as federal applicable requirements in the Title V permit.

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

9 VAC 5-50-310, Odorous Emissions

9 VAC 5-50-320, Toxic Pollutants

State emission standards for odor and toxic pollutants are not federally enforceable since the regulations are not part of a State Implementation Plan (SIP) and since toxics conditions in the NSR permit are in a state-only enforceable designated section. State toxics conditions will not be included in the Title V permit.

FUTURE APPLICABLE REQUIREMENTS

The facility is not a major source of HAPs, and is therefore not subject to current MACT standards. New area source regulations for selected source categories are scheduled for development within the coming years. However, none of these categories appear to include the operations at this facility.

INAPPLICABLE REQUIREMENTS

The company identified several state and federal regulations that do not apply to the facility.

40 CFR 60.110b-117b, **Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984**, does not apply to two 6,000 gallon compound storage tanks, one 8,000 gallon storage tank, or to two 10,000 gallon solvent/lubricant storage tanks. This regulation applies to tanks whose capacities exceed 75 m³ (19,813 gallons).

40 CFR 60.490-496, **Subpart WW - Standards of Performance for the Beverage Can Surface Coating Industry**, does not apply. The facility does not coat beverage cans, but only applies a sealing compound to the can ends. The ends are shipped to other facilities where can bodies are assembled and coated.

9 VAC 5-40-4010, **Emission Standards for Can Coating Application Systems**, 9 VAC 5-40-3410, **Emission Standards for VOC Storage and Transfer**, and 9 VAC 5-40-3260, **Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents**, do not apply to this facility since it is not located in a VOC control area.

40 CFR Part 63.460-469, **Subpart T - National Emission Standards for Halogenated Solvent Cleaning** and 9 VAC 5 Chapter 60, Article 2 are not currently applicable. The facility does not use any halogenated cleaning solvents.

40 CFR 63.3480-3561, **Subpart KKKK – National Emission Standards for Surface Coating of Metal Cans** does not apply to this facility because it is not considered a major source of HAP emissions.

40 CFR 63.3880-3981, **Subpart MMMM - National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products** does not apply because the facility is not a major source of HAP emissions.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the

Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation¹ (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
IS-1	Industrial Lift Trucks	9 VAC 5-80-720 A.23		
IS-2	gas-fired space heaters	9 VAC 5-80-720 A.6		
IS-3	One gas-fired water heater	9 VAC 5-80-720 C.2		40,000 Btu/hr
IS-4	Propane-powered floor scrubber	9 VAC 5-80-720 A.9		
IS-5	Propane/oil-powered lift	9 VAC 5-80-720 A.23		
IS-6	Steam Cleaner	9 VAC 5-80-720 A.61		
IS-9	Two 6,000 gal Compound Storage Tanks	9 VAC 5-80-720 B.2	VOC	
IS-10	8,000 gal Water-base Compound Storage Tank	9 VAC 5-80-720 B.2	VOC	
IS-16	Four AT4 Conversion Presses	9 VAC 5-80-720 B.2	VOC	
IS-17	Two Bruderer Tab Presses	9 VAC 5-80-720 B.2	VOC	
IS-18	Two 10,000 gal Solvent/Lube Storage Tanks	9 VAC 5-80-720 B.2	VOC	
IS-19	Cold Cleaner Parts Washers	9 VAC 5-80-720 B.2	VOC	
IS-20	Preferred Compound Liners	9 VAC 5-80-720 B.2	VOC	

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The company did not request that any of the information in the Title V permit application be considered confidential.

PUBLIC PARTICIPATION

The draft/proposed permit was placed on public notice in the *Bristol Herald Courier* from July 21, 2006 to August 20, 2006, with no comments received from the public or affected states. EPA review extended through September 4, 2006, with no comments received.

However, during this timeframe, the company determined that another process at the facility could be subject to applicable requirements. The draft/proposed permit was revised to account for the additional requirements, and the public notice was repeated in the *Bristol Herald Courier* from September 25, 2006 to October 25, 2006. The revised draft/proposed permit was reviewed by EPA a second time. No comments were received from the public, affected states, or EPA.